

REMARKS

Claims 1-20 are currently pending in this application. Claims 1, 19 and 20 have been amended. No new matter has been introduced. Support for the amendments can be found at, e.g., page 11, lines 14-16 and page 42, lines 18-24.

Claims 1-8, 13, 14, and 17-20 stand rejected under 35 USC § 102(b) as being anticipated by Boyle (U.S. Patent No. 5,864,854). This rejection is respectfully traversed for the reasons set forth below.

The inventions of Claims 1-12 are concerned with the provision of a digital data system that employs a data structure including “source data entities” (e.g. content) and “data items,” each data item serving as a pointer to one of the “source data entities.” The “data items” can be thought of as the ‘keys’ that give access to the corresponding ‘content’.

The “data items” are held in an “item store” at the server and local copies of these “data items” are stored at client devices where they can be used by appropriately authorised users as the ‘key’ to access the respective ‘content’, that is the “source data entities”, to which the locally stored “data items” point.

Thus, in the invention, of Claims 1-20, it is only the “data items” (i.e. the pointers) that need be distributed and stored locally rather than the “source data entities” (e.g. content) themselves (although in some embodiments of the invention “source data entities” may be distributed in addition to the “data items”, but in this case the “source data entities” are still accessed via the “data items” that point to them).

This approach has real advantages. For instance, as the “data items” are distinct from the content to which they point (i.e. “source data entities”), they can adopt a common format and operations on these “data items” within the system (e.g. grouping them, changing access rights,

adding new data, reorganising groups, etc.) are easily executed without any reference to the format of the “source data entity” (e.g. content) to which each “data item” points (even where the “source data entities” are of different, or even incompatible, formats).

It is these benefits that make the system particularly suited, for example, to applications such as data amalgamation and work flow management, as explained in the specification on pages 42 and 43.

The separation of the content (“source data entities”) and the ‘key’ to access the content (“data items”) has other potential benefits. It avoids the need, as already noted above, to store all content locally, as the “data item” (which is locally stored) can direct the user to a remote location (connected to the network) to access the associated “source data entity.” This saves memory resources on the client. It also has the potential to offer greater security to content owners, who may prefer that copies of their content are held centrally rather than distributed to client devices.

In contrast to the invention of Claims 1-20, Boyle describes a system in which ‘content’ (Boyle’s “data items”) is distributed, possibly in multiple copies, between networked clients. A group cache look-up table is shared by a group of interconnected clients and has entries that identify which data items are cached by which clients. When a client requests a data item not stored in its own local cache, it refers to the group cache look-up table to determine whether it can obtain the desired data item from the cache of one of the other clients in its group rather than having to request the data item from a server.

Boyle’s “data items” are different from the “data items” of Claims 1-20. The “data items” of Claims 1-20 comprise “a pointer to a source data entity accessible from this network” (“source data entities”) whereas Boyle’s “data items” are the content itself.

Boyle does not disclose or suggest a system in which a plurality of pointers (the present invention's "data items") are held both at a server and at a client, the pointers at the client being a duplicate of corresponding pointers at the server as required in Claims 1-20.

Boyle's cache look-up table does include pointers to the clients at which the relevant content is stored, but the cache look-up table is not stored both at a server and the clients. Either a copy is stored at each client or, more preferably according to the teaching of Boyle, there is a single copy of the cache look-up table distributed between the clients of the group (col. 3, lines 32 to 49). Accordingly, withdrawal of the rejections of Claims 1-8, 13, 14, and 17-20 is respectfully requested.

Claims 9-12, 15 and 16 stand rejected under 35 USC § 103 as being obvious over the combination of Boyle and Nori (U.S. Patent No. 5,999,943). This rejection is respectfully traversed. As discussed above, Boyle neither discloses nor suggests a system in which data items comprising pointers to source data entities are stored at both a client and a server as required by Claim 1, and Nori neither discloses nor suggests this feature. Accordingly, withdrawal of the rejections of Claims 9-12, 15 and 16, which depend from Claim 1, is respectfully requested.

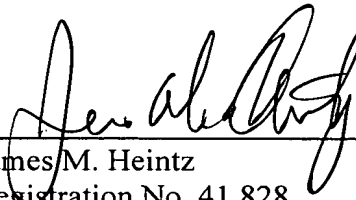
CONCLUSION

In light of the foregoing remarks, applicants submit that the application is now in condition for examination on the merits. Early notification of such action is earnestly solicited. Should the Examiner have any suggestions to place the application in even better condition for

allowance, Applicants request that the Examiner contact the undersigned representative at the telephone number listed below.

Respectfully submitted,

DLA PIPER RUDNICK GRAY CARY US LLP



James M. Heintz
Registration No. 41,828

1200 Nineteenth Street, N.W.
Washington, D.C. 20036-2412
Telephone No. (202) 861-3900
Facsimile No. (202) 223-2085